

Presentation Title	Place in Schedule
Noise Control Design for Health & Safety	Poster Session <i>Day 2 – Wednesday – May 9th, 2018</i> <i>8:30am-9:30am</i>
Description of Presentation	Presenter Name(s) And Credentials
<p>Noise control is considered an expensive alternative to hearing protection, and is rarely integrated into facility, equipment, and operation decisions at the risk to staff. With modern sound measurement tools, such as camera enabled sound intensity wands, acoustic cameras, and advanced data logging dosimeters, we can now better understand the source of noise impacting your staff. With this information it is possible to develop a detailed and cost-effective noise remediation plan. This presentation will introduce these tools, how they work, the best application for these tools, and provide guidance for developing a process to introduce real change with respect to noise control.</p> <p>Most noise control efforts are done reactively within existing facilities, but with the right foresight some companies are now considering the noise impacts of their future or renovated facilities. The current standards associated with Buy Quiet and other noise control considerations lacks clear design criteria, and poorly defined sound emission specifications. This session will provide some key takeaways for your to use with your engineering and maintenance staff to ensure future equipment selections improve the noise within your facility and consider the overall impact. This session includes audio examples and a frank discussion about the current hazards associated with designing for hearing protection. Most people can only produce speech sounds, without shouting, of about 80 dBA at 3 feet, and in order to have intelligible conversations their voice needs to be at least 6 dB louder than the background noise. This means that in order to have an audible conversation within the facility the sound pressure level cannot exceed 74 dBA, and should not exceed 70 dBA for loud vocal effort conversations. This is similar to the background interior noise level on most commercial aircraft. Through holistic noise control design and implementation this is possible for many facilities, but is a</p>	<p>Erik Miller-Klein, PE, INCE Bd. Cert. <i>A3 Acoustics, LLP</i></p>

deviation from the current standard practices. The tools and opportunities are there to create acoustically safer workplaces, let's learn how to work together to take on this challenge.